

**Vegetation Management**  
**Yearly Operational Plan (YOP)**  
**Acton Massachusetts**  
**2017**

Prepared By:

Town of Acton – Municipal Properties  
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## **Table of Contents**

Yearly Operational Plan Notice	3
Yearly Operational Plan Signature Page	4
Individual Supervising Yearly Operational Plan	5
Municipal Department Performing Herbicide treatments	5
Identification of Target Vegetation	6
Herbicides Proposed For Use in 2017	7
Herbicide Application Techniques and Alternative Control Procedures	8
Sensitive Area Restrictions	10
Procedures for Loading and Handling Herbicide Concentrates	11
Emergency Contacts	11
Appendices	12
Daily Report Form	
Curbline Burning Permit	
Vegetation Management Plan Approval	
Razor-Pro data sheets	
Garlon 4 Ultra data sheets	
Tordon data sheets	
Pathway data sheets	
Sensitive Area Map	

## **Yearly Operational Plan**

The purpose of 333 CMR 11.00, Rights of Way Management, is to promote the implementation of integrated pest management techniques and to establish standards, requirements, and procedures necessary to minimize the risk of unreasonable adverse effects on human health and the environment associated with the use of herbicides to maintain streets, road, sidewalks and paths. These regulations establish procedures that guarantee ample opportunity for public and municipal agency review and input on the right-of-way maintenance plans.

A yearly operational plan (YOP) must be submitted to the Department of Agricultural Resources (Department) every year herbicides are intended for use to maintain rights-of-way. The YOP provides a detailed program for vegetation management for the year. A five year Vegetation Management Plan (VMP) was approved by the Department and is available for review at the Municipal Properties Department.

Upon receipt of this YOP, the Department publishes a notice in the Environmental Monitor. The Town must provide a copy of the proposed YOP and Environmental Monitor notice to the Board of Health, Conservation Commission, and the Town Manager's office for the Town of Acton. The Department allows a 45-day comment period on the proposed YOP beginning with the publication of the notice and receipt of the YOP and Environmental Monitor notice by the Town.

Public notification of herbicide application to the streets is made at least 21 days in advance of the treatment by a separate notice. Notice is made to the Department of Agricultural Resources, Town Manager's Office, Board of Health, and the Conservation Commission in the Town of Acton.

Any comments on this YOP should be made to the person designated herein as the person supervising the YOP or the person performing the treatment.

The proposed herbicide application period for 2017 will commence on or about June 15, 2017, and will cease on or about August 15, 2017, based on weather and other operational considerations.

## **Municipal Yearly Operational Plan**

This Yearly Operational Plan, approved by the Massachusetts Department of Agricultural Resources pursuant to Rights-of-Way Management Regulations (333 CMR 11.00), has been adopted by the roadway vegetation management program in the Town of Acton. The undersigned hereby acknowledges that the conditions of the Yearly Operational Plan will be adopted and complied with.

Municipality: Acton Massachusetts

Name: Dean Charter / Ryan Hunt

Agency: Municipal Properties Department

Address: 472 Main Street, Acton, MA 01720

Telephone: (978) 929-7744

Email: MP@acton-ma.gov

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Wetland Determination  
Issued by: \_\_\_\_\_

### **Individual Supervising YOP**

Name and Title: Dean Charter, Tree Warden  
Department: Municipal Properties  
Address: 472 Main Street, Acton, MA 01720  
Telephone: (978) 929-7744  
Signature: \_\_\_\_\_

### **Municipal Department Performing Herbicide Treatment**

Town employees will perform the herbicide treatment. Applicators are certified by the Massachusetts Department of Agricultural Resources in the applicator category 40. Certified Applicators may be assisted by Licensed Applicators, but the Town will have an individual on site with a category 40 (rights-of-way) at all times.

Certified Applicator: Dean Charter Cert#4353, categories 35,36,37,40,47

Certified Applicator: Ryan Hunt Cert# 39000, category 40

Licensed Applicator: Paul Hunt, Lic#43727

Department: Municipal Properties  
Address: 472 Main Street, Acton, MA 01720  
Telephone Number: (978)929-7744  
Email: mp@acton-ma.gov

## **Yearly Operational Plan for 2017**

The following information is provided as details of the YOP of the Town of Acton in accordance with the requirements of 333 CMR 11.06 (2).

### **Identification of Target Vegetation**

Target vegetation will be limited to species that pose a safety hazard, compromise infrastructure, are a public nuisance, or are invasive and may have detrimental effects on natural resources.

#### **Hazard Vegetation**

Hazard vegetation poses a risk to public safety and represents vegetation that impedes movement along public ways. Hazard vegetation may obscure sightlines, obscure signs, obscure vehicular movement, create windfall hazards, block storm drains and cause winter shading (causing ice/reduced melting). Hazard vegetation may include but is not limited to trees, tree limbs and shrubs.

#### **Nuisance Vegetation**

This category includes vegetation that could cause problems to the general public, employees or contractors and generally include poisonous and noxious plant species. Nuisance vegetation poses a risk to safety and health often due to dermal contact with plants that are poisonous, heavily-thorned or densely colonized. Target vegetation in this category is primarily Poison Ivy and other nuisance vegetation within 10 feet of the edge of pavement.

#### **Detrimental Vegetation**

Detrimental vegetation includes grasses and woody plants that are destructive or compromise the function of infrastructure by growing in cracks along the roadway, pavement/bridge joints, medians/traffic islands, and drainage structures/drainageways.

#### **Invasive Vegetation**

Invasive species can colonize a space and virtually eliminate the biodiversity of an area. This can result in changes in wildlife due to habitat change, impede natural hydrologic function and cause an overall change in the natural functions of an area. Certain vines, such as Oriental Bittersweet (*Celastrus orbiculatus*) can overwhelm even large trees, killing them by shading or breaking them due to overloading. Additionally, vining type invasive plants can conceal hidden defects in trees or reach over to contact utility lines. Japanese Knotweed (*Fallopia japonica*) thickets can present a roadside fire hazard. MultiFlora Rose (*Rosa multiflora*) can cause injury to pedestrians and cyclists due to prolific thorns and arching branches. Managing invasive species via mechanical means can be ineffective and/or detrimental depending on the species, making the colonization stronger. In these situations, the use of an herbicide may be necessary. Working in

conjunction with the Conservation Commission and/or private groups, there may be opportunities to remove invasive vegetation and encourage the growth of native species. Vegetation listed on the MA Department of Agricultural Resources *Massachusetts Prohibited Plant List* are included in this category.

#### Description of Methods Used to Flag or Otherwise Designate Sensitive Areas

The sensitive areas detailed herein are easily recognizable in the field as described and will be marked in the street if necessary.

Attached is a map of the Rights-of-Way that will be included in the 2017 YOP. It is the intention of the Town of Acton to spray the vegetation along the curb lines and sidewalks in the above referenced map. The map identifies the Sensitive Areas where “No Spray Zones” have been established, all of which are clearly identified by structures, houses, or other field methods.

### **Herbicides Proposed**

The following herbicide(s) are proposed for use in calendar year 2017:

Herbicides & Adjuvants	Active Ingredient	EPA Registration Number(s)	Mix Concentration
Razor Pro	Glyphosate	228-366	1- 5% for foliar applications. <b><u>May be used for cut stump treatment in sensitive areas; refer to label.</u></b>
Garlon 4 Ultra	triclopyr	62719-527	6 qts./100 gal. tank mix. No more than 8 quarts Garlon 4 per acre
Tordon RTU	Picloram, 2,4,D	62719-31	4 gal./acre/year only cut stump applications <b><u>not for use in sensitive areas</u></b>
Pathway	Picloram, 2,4,D	62719-31	4 gal. /acre/year only cut stump applications <b><u>not for use in sensitive areas</u></b>

Manufacturer’s herbicide labels and the fact sheets for the above listed herbicides are attached to this YOP.

## **Herbicide Application Techniques and Alternative Control Procedures**

The herbicide(s) will be applied in accordance with the instructions in the attached manufacturer's label. Alternative control procedures, applicable at the designated "No Spray Zones" will consist of hand cutting, mowing, or selective trimming. Other alternative controls will include routine street sweeping along with crack and road repairs.

### **Foliar herbicide application techniques**

Foliar treatments will be made using a 100 gal hydraulic truck mounted sprayer, a 3-5 gal back pack style sprayer or 3.5 gal pump sprayers. Only low pressure applications will be made (under 60 psi). The herbicide solution is applied to lightly wet the target plant. This technique has few limitations with the exception being reduced effectiveness on tall, high-density target vegetation and will not be used on vegetation over 12 feet in height which is not expected at all under this YOP. It is desired that the area treated be allowed to regrow with low maintenance vegetation to prevent erosion or recolonization by nuisance vegetation; herbicide choices should be made accordingly.

### **Cut Stump treatment techniques**

The overarching objective is to provide safety required vegetation management while utilizing the absolute minimum of herbicides required. When woody vegetation is cut down it is preferred to eliminate the stump to grade level or below and to prevent resprouting. High stumps and sprouts present tripping and mowing hazards, and resprouts can quickly block visibility and access. Therefore, whenever possible, stumps will be ground out below grade and the surface restored. When this is not practical due to access, size, or volume of stumps, cut stump herbicide treatments will be used. When a large thicket with many sprouts is cut, the stumps will be allowed to resprout and a foliar application to the new vegetation will be undertaken to eliminate the sprouts and stumps. When a smaller number of stumps are cut and cannot be ground out, herbicide may be applied directly to the cut stump surface immediately after cutting. Pathway or Tordon can be used for this purpose generally, but in sensitive areas only Razor Pro may be applied, at quantities allowed for under the label. It is desired that the area treated be allowed to regrow with low maintenance vegetation to prevent erosion or recolonization by nuisance vegetation; herbicide choices should be made accordingly.

All equipment used for vegetation management programs must be maintained in good working condition, and should be of adequate design and ability to produce the professional quality of work that the Town requires. Because the Town recognizes the vast variety and performance of herbicide application equipment, dictating how that

equipment should be calibrated to deliver precise amounts of herbicide to effectively control a host of vegetation conditions is literally impossible. Therefore, the Town insists that its employees utilize the most appropriate application equipment, calibrated to effectively and legally control target vegetation.

The Town of Acton Municipal Properties Department will be responsible to ensure that vegetation management activities are conducted in a professional, safe, efficient manner, with special attention directed towards minimal environmental impact. “Qualified” means those personnel who have been trained to recognize and identify target and non-target vegetation and are knowledgeable in the safe and proper use of both mechanical and chemical vegetation management techniques, and are familiar with the most recent sensitive area map. All personnel applying herbicides in Massachusetts must be licensed in the Commonwealth and must work under the on-site supervision of a certified applicator (category 40). All contract personnel will also follow all Label instructions regarding Personal Protective Equipment (PPE).

The Town will rely on town employees listed in the YOP for vegetation management applications, and the Town will comply with all applicable federal and state laws and regulations. These include, but are not limited to, applicable OSHA, FIFRA and DOT regulations, 333 CMR 1-15.00, Rights-of-Way Management 333 CMR 11.00, Chapter 132B, Chapter 85 of the Acts of 2000 (see Appendix IV) and 321 CMR 10.00 as managed by NHESP.

Herbicides will only be applied in a safe and judicious manner, in compliance with all-applicable State and Federal pesticide regulations.

Herbicides will be selected for a particular target based on effectiveness of control, non-target impacts, and toxicity.

Applicators will at all times exercise good judgment and common sense during herbicide treatment activities, and will immediately cease operations if adverse conditions or other circumstances warrant.

Herbicides will NOT be applied during the following adverse weather conditions:

- A. During high wind velocity, per 333 CMR 11.03
- B. Foliar applications during periods of dense fog, or moderate to heavy rainfall
- C. Foliar applications of volatile herbicides during periods of high temperatures (90 plus degrees Fahrenheit) and low humidity
- D. Cut Stump applications when deep snow (i.e. 6 inches plus or ice frozen on stem or stump) prevents adequate coverage of target plants to facilitate acceptable control
- E. Cut stump treatment when heavy sap flow prevents adhesion of the chemical to the stump.

# Sensitive Area Restrictions

333 CMR 11.04

## CONTROL STRATEGIES FOR SENSITIVE AREAS

Sensitive Area	Minimum Buffer Zone (feet)	Control Method	Restriction Code
Public Ground Water Supplies	400'	Mechanical Only	None
Primary Recharge Area	Designated buffer zone or 1/2 mile radius	Mechanical, Recommended Herbicides*	1
Public Surface Water Supplies (Class A & Class B)	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, within 400' upstream of water source	100'	Mechanical Only	None
	100'-400'	Recommended Herbicides	1
Tributary to Class A Water Source, greater than 400' upstream of water source	10'	Mechanical Only	None
	10'-200'	Recommended Herbicides	1
Class B Drinking Water Intake, within 400' upstream of intake	100'	Mechanical Only	None
	100'-200'	Recommended Herbicides	1
Private Drinking Water Supplies	50'	Mechanical Only	None
	50'-100'	Recommended Herbicides	2
Surface Waters	10'	Mechanical Only	None
	10'-100'	Recommended Herbicides	2
Rivers	10' from mean annual high water line	Mechanical Only	None
	10'-200'	Recommended Herbicides	2
Wetlands	100'	Low-pressure Foliar, CST, Basal Recommended Herbicides	1
Habitated Areas	100' (for high-pressure foliar only)	Recommended Herbicides	2
Agricultural Area (Crops, Fruits, Pastures)	100' (for high-pressure foliar only)	Recommended Herbicides	2
Certified Vernal Pools	10'	Mechanical Only	None
Certified Vernal Pool Habitat	10'-outer boundary of habitat	As recommended by NHESP in their permit process, no treatment without written permission	
Priority Habitat	As recommended by NHESP in their permit process, no treatment without written permission		

Restriction Code "1": A minimum of twenty-four months shall elapse between applications

Code "2": A minimum of twelve months shall elapse between applications

## **Procedures and Locations for Handling, Mixing and Loading of Herbicide Concentrates and recording applications**

The herbicide will be mixed in the controlled environment at the DPW Yard, located at 14 Forest Road, Acton, MA, 01720.

Although it is expected that all the mixed herbicide will be used, any remaining will be stored at the DPW Yard in accordance with manufacturer's instructions. The absorbent product "Speedi-Dri" will be available for use at the locations of application. If there is a leak in the hose, the pump will be immediately shutoff and equipment will be washed at the DPW Yard

Herbicides will be handled and applied only in accordance with the label instructions. Employees will strictly adhere to all mandated safety precautions directed towards the public, the applicator and the environment.

The Applicators working for the Town of Acton will complete daily vegetation management reports that include:

- A. Date, name, and license/certification number of applicator
- B. Identification of site or work area
- C. List of crew members
- D. Type of equipment and hours used, both mechanical and chemical
- E. Method of application and description of target vegetation
- F. Amount, concentration, product name of herbicide(s), adjuvants, and dilutants (EPA registration numbers must be on file)
- G. Weather conditions
- H. Notation of any unusual conditions or incidents, including public inquiries
- I. Recording and/or verification of sensitive areas on ROW maps

### **Emergency Contacts**

Acton Municipal Properties Department	978 929-7744
Acton Fire Department	978 264-9645 or 911
Acton Police Department	978 274-9638 or 911
Massachusetts Pesticide Bureau	617-626-1781
Bureau Environmental Health Assessment	617-624-5757
Mass. Department of Environmental	617-556-1133
Protection Incident Response Unit	888-304-1133
Chem Trec	800-424-9300
EPA Pesticide Hotline	800-858-7378
Massachusetts Poison Control Center	800-682-9211
Tordon (Dow Agro-Sciences)	800-992-5994
Garlon 4 Ultra (Dow Agro-Sciences)	800-992-5994
Pathway (Dow Agro-Sciences)	800-992-5994
Razor-Pro (NuFarm Americas)	877-325-1840

## **Appendices**

Daily Report Form

Curbline Burning Permit

Vegetation Management Plan Approval

Razor-Pro data sheets

Garlon 4 Ultra data sheets

Tordon data sheets

Pathway data sheets

Sensitive Area Map